Paper No. 19

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte BABAR A. KHAN, JACOB BRUININK, ADRIANUS L.J. BURGMANS, HENRI R.J.R. VAN HELLEPUTTE, PETRUS F.G. BONGAERTS, KAREL E. KUIJK, THOMAS S. BUZAK, KEVIN J. ILCISIN and PAUL C. MARTIN

Appeal No. 97-3246
Application 08/384,090[1]

ON BRIEF

Before THOMAS, HAIRSTON and KRASS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 11 through 16. Claims 1 through 10 have been withdrawn

[1] Application for patent filed February 6, 1995.

in response to a restriction requirement.

The instant invention pertains to plasma-addressed liquid crystal (PALC) displays. More particularly, the channel substrate of a PALC display panel is fabricated by anodically bonding a thin sheet of glass to the substrate to cover the plasma channels in such a manner so as to result in less stress in the thin sheet, thus permitting post processing of the sheet.

Representative independent claim 11 is reproduced as follows:

11. A plasma-addressed display device comprising a layer of electro-optic material, data electrodes coupled to the electro-optic layer and adapted to receive data voltages for activating portions of the electro-optic layer, a plurality of spaced elongated plasma channels containing an ionizable gas and electrodes and extending generally transverse to the data electrodes for selectively switching on said electro-optic portions, said plasma channels being formed between walls in a substrate, and a thin sheet attached to the said substrate to cover the channels,

characterized in that the thin sheet is anodically bonded to the substrate.

The examiner relies on the following references:

Iwama	5,349,454	Sept. 20, 1994
Matsumoto et al.		

(Matsumoto)	5,444,335	Aug. 22, 1995
Kimura (European Patent Application)	0 597 432	May 18, 1994

Claims 11 through 13, 15 and 16 stand rejected under 35 U.S.C. § 102(b) as anticipated by Iwama. Claims 14 and 16 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner cites Iwama and Matsumoto with regard to claim 14 and Iwama and Tanamachi with regard to claim 16.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

Turning first to the rejection under 35 U.S.C. § 102(b), the examiner contends that Iwama discloses all that is claimed but for the anodically bonding the thin sheet to the substrate. Appellants apparently agree with this analysis based on a lack of argument in this regard as to any particular claim limitation save for the anodically bonding.

The examiner states that no patentable weight was given to the

> anodic bonding process because applicant [sic, applicants'] admitted prior art EP-581,376 in column 2, lines 1-10 clearly discloses that bonding also includes anodic or fusion bonding [Final Rejection-page 5].

This reasoning is not understood. The European patent cited by the examiner forms no part of the statement of the rejection. The rejection is one of anticipation under 35 U.S.C. § 102(b) over Iwama. EP-581,376 is not before us and may not be used, in any manner, as evidence to reject the claims since this reference forms no part of the rejection before us. See In re Hoch, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970). If the examiner is attempting to use this reference's teaching as evidence that it would have been obvious to employ anodic bonding in Iwama, an obviousness rejection under 35 U.S.C. § 103 should have been made. The only rejection before us, regarding claims 11 through 13, 15 and 16 is one of anticipation under 35 U.S.C. § 102(b) over Iwama and that is all that we consider in this regard.

The examiner cites In re Hughes, 496 F.2d 1216, 182 USPQ 106 (CCPA 1974) for the proposition that when a product is incapable of description by product claims which are of different scope, an applicant is entitled to product-by-process claims that recite the novel process as a hedge against the possibility that the broader product claims may be invalidated.

We are familiar with Hughes and do not see how that case supports the examiner's position that the claimed anodic bonding limitation may be ignored. Whereas, in general, process steps in a product claim may be ignored because determination of patentability is based on the product itself and not on the process of making that product, In re Thorpe, 777 F.2d 695,
227 USPQ 964 (Fed. Cir. 1985), Hughes establishes an exception to that rule where the product is incapable of being described solely by structure or physical characteristics.

In the instant case, it is the anodic bonding between the thin glass sheet and the substrate that is said to give the invention its improved characteristics over the prior PALCs. There would appear to be no reasonable alternative ways to

describe this characteristic in terms of physical structure but, if so, it would appear from Hughes that the burden was on the Patent and Trademark Office to indicate where or how appellants' invention is, or may be, so described. We find that the examiner has not met this burden.

While the examiner cites Hughes and contends that the claimed "anodically bonded" limitation is a process limitation not permitted "under the Hughes rule" [answer-page 6], we find just the opposite. In our view, Hughes supports appellants' position [principal brief-page 7] that since there is no other way to claim the product to accurately describe the feature which distinguishes the product from the prior product, "anodically bonded" must be given patentable weight.

In responding to appellants' argument, the examiner spends two pages [answer-pages 4-5] discussing U.S. Patent No. 5,438,343, referred to in the instant specification and incorporated by reference therein. We are at a loss to understand what bearing this patent has on the instant rejection under 35 U.S.C. § 102(b). First, this patent forms no part of the examiner's rejection. Second, it is doubtful

that the patent even constitutes a viable reference because of the date of publication and the common assignee vis-a-vis the instant application. Finally, the patent appears to be directed to gas discharge displays rather than to PALCs as is the instant claimed invention. In any event, the examiner's statements, at pages 4-5 of the answer, regarding this patent appear to have no relevance to the rejection at hand.

Accordingly, we will not sustain the rejection of claims 11 through 13 and 15 under 35 U.S.C. § 102(b). Further, we will not sustain the rejection of claims 14 and 16 under 35 U.S.C. § 103
since neither Matsumoto nor Tanamachi provides for the deficiency of Iwama, i.e., neither reference teaches or suggests the claimed "anodically bonded" limitation.

We note, in passing, however, that with regard to claim 14, even though the combination of Iwama and Matsumoto does not meet the "anodically bonded" limitation of claim 12, and even though we would agree with appellants that it would not have been obvious to even make the combination since Iwama is directed to PALCs and Matsumoto is directed to gas discharge lamps, we do not agree with appellants that Matsumoto's

teaching of "at least" 60 Torr, meaning that a pressure above 760 Torr would be acceptable, would not meet the limitation of claim 14 requiring a pressure "below 1 Atm," or 760 Torr. Of course, a pressure above 760 Torr, although acceptable to Matsumoto, would not meet the claim language. However, a range of 60-760 Torr is still acceptable to Matsumoto and any pressure within that range *does* meet the claim limitation of "below 1 Atm."

The examiner's decision is reversed.

REVERSED

JAMES D. THOMAS Administrative Patent Judge	)	
KENNETH W. HAIRSTON Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ERROL A. KRASS Administrative Patent Judge	)	

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